

WHAT IS CLAIMED IS:

1. A method for providing search results, comprising:
receiving a voice search query from a user;
deriving one or more recognition hypotheses from the voice search query,
each recognition hypothesis being associated with a weight;

5 constructing a weighted boolean query using the recognition hypotheses;
providing the weighted boolean query to a search system; and
providing results of the search system.

2. The method of claim 1 wherein the deriving one or more recognition
hypotheses includes:

10 using one or more of a language model, phonetic dictionary, and acoustic
models to derive the recognition hypotheses.

3. The method of claim 2 further comprising:
updating one or more of the language model, phonetic dictionary, and
acoustic models using the voice search query.

15 4. The method of claim 1 further comprising:
identifying a language model based on at least one characteristic
associated with the user, and

wherein the deriving one or more recognition hypotheses includes:

using the identified language model to derive the one or more recognition hypotheses.

- 5 5. The method of claim 1 wherein each recognition hypothesis includes one or more terms, and

wherein the constructing a weighted boolean query includes:

determining a length of a shortest recognition hypothesis,

pruning a length of each recognition hypothesis up to the length of the shortest recognition hypothesis,

10 determining a length of a longest pruned recognition hypothesis,

selecting a number of recognition hypotheses based on one or more query parameters,

determining term weights, and

forming a weighted boolean query.

- 15 6. The method of claim 5 wherein the query parameters include the determined length of the longest pruned recognition hypothesis, a value representing a total number of terms to be included in a query, and a value representing a proportion of new terms added from a first recognition hypothesis to a second recognition hypothesis.

7. The method of claim 5 wherein the query parameters vary by user or user group.

8. The method of claim 1 wherein the providing results of the search system includes:

adjusting a ranking of the results of the search system based on the weights.

5 9. The method of claim 1 wherein the providing results of the search system includes:

organizing the results based on the weights.

10. The method of claim 1 further comprising:

discarding, prior to constructing the weighted boolean query, those
10 recognition hypotheses associated with a weight below a threshold value.

11. The method of claim 1 wherein the weighted boolean query is a weighted OR-query.

12. The method of claim 1 further comprising:

refining the weighted boolean query based on the results of the search
15 system.

13. The method of claim 12 wherein the refining includes:
determining a quantity of results related to each recognition hypothesis,
and
5 discarding recognition hypotheses having no results.

14. The method of claim 12 wherein the refining includes:
determining a quantity of results related to each recognition hypothesis,
and
adjusting the weight associated with the recognition hypothesis based on
10 the quantity.

15. The method of claim 1 further comprising:
detecting compounds in the one or more recognition hypotheses, and
wherein the constructing a weighted boolean query includes:
constructing the weighted boolean query using the recognition
15 hypotheses and the detected compounds.

16. The method of claim 1 further comprising:
detecting compounds in the results of the search system;
refining the weighted boolean query based on the detected compounds;

providing the refined weighted boolean query to the search system; and
providing the new results.

17. A system for providing search results relating to a voice search query from
a user, comprising:

- 5 means for receiving the voice search query from the user;
means for deriving one or more recognition hypotheses from the voice
search query;
means for associating a weight with each of the recognition hypotheses;
means for constructing a weighted boolean query using the recognition
10 hypotheses;
means for providing the weighted boolean query to a search system; and
means for obtaining results from the search system..

18. A computer-readable medium containing instructions for controlling at
15 least one processor to perform a method for providing search results, comprising:
receiving a voice search query;
deriving at least one recognition hypothesis from the voice search query,
each recognition hypothesis being associated with a weight;
constructing a weighted boolean query using the at least one recognition
hypothesis;
20 providing weighted boolean query to a search system; and

providing results of the search system.

19. A server comprising:

a memory configured to store instructions and at least one of a language model, a phonetic dictionary, and acoustic models; and

5 a processor configured to execute the instructions to obtain a voice search query, derive one or more recognition hypotheses from the voice search query, determine a weight for each recognition hypothesis, construct a weighted boolean query using the recognition hypotheses, provide the weighted boolean query to a search system, and present results of the search system.

10 20. A method for generating a search query, comprising:

receiving one or more recognition hypotheses, each recognition hypothesis being constructed from a voice search query;

determining a length of a shortest recognition hypothesis;

pruning a length of each recognition hypothesis up to the length of the

15 shortest recognition hypothesis;

determining a length of a longest pruned recognition hypothesis;

selecting a number of recognition hypotheses based on the length of the longest pruned recognition hypothesis;

determining query term weights; and
forming a weighted boolean query out of each term position in the selected
recognition hypotheses.

21. The method of claim 20 wherein the pruning includes:
5 removing noise words from the recognition hypotheses.

22. The method of claim 20 wherein the selecting includes:
identifying a number of recognition hypotheses based on the determined
length of the longest pruned recognition hypothesis, a value representing a total number
of terms to be included in a query, and a value representing a proportion of new terms
10 added from a first recognition hypothesis to a second recognition hypothesis.

23. A server comprising:
a memory configured to store instructions; and
a processor configured to execute the instructions to receive one or more
recognition hypothesis, each recognition hypothesis being constructed from a voice
15 search query, determine a length of a shortest recognition hypothesis, prune a length of
each recognition hypothesis up to the length of the shortest recognition hypothesis,
determine a length of a longest pruned recognition hypothesis, select a number of
recognition hypotheses, the number being based on a value representing the length of the

longest pruned recognition hypothesis, determine query term weights, and form a weighted boolean query out of each term position in the selected recognition hypotheses.

24. A computer-readable medium containing instructions for controlling at least one processor to perform a method for generating a search query, comprising:

receiving at least one recognition hypothesis, the recognition hypothesis

5 being constructed from a voice search query and having one or more terms;

determining a length of a shortest recognition hypothesis;

pruning a length of each recognition hypothesis up to the length of the shortest recognition hypothesis;

determining a length of a longest pruned recognition hypothesis;

10 selecting a number of recognition hypotheses, the number being based on the length of the longest pruned recognition hypothesis;

determining term weights; and

forming a weighted boolean query out of the selected recognition hypotheses.

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